

## Why aquathermal energy?

The North Sea Region has a lot of surface water and this water absorbs a lot of solar energy, hundreds of times more than we need. Free warmth! In the WaterWarmth project we investigate the possibilities of using AE as a part of the energy transition. the aim is to facilitate energy cooperatives and make people aware of this sustainable way of heating.

## Challenges

1. Energy from fossil fuels is cheaper.
2. There is a need for investments for infrastructure for heating networks.
3. Realizing large-scale heating networks requires a large investment for which there is not yet a good business model.
4. Local installers and contractors lack knowledge for the design of systems that use sustainable and collective heat.
5. There is not yet sufficient, practically verified, knowledge about the effects of large-scale aquathermal energy on ecology and water quality.
6. There is not yet a clear government policy on the extraction and supply of heat.
7. People are insufficiently familiar with integrated energy systems.

What is aquathermal energy is the extraction, storage and distribution of heat from water. Within aquathermal energy there are three different main sources for defective heat: waste water, drinking water and surface water. With the help of a heat exchanger, heat energy is extracted from a source and with the help of a heat exchanger this energy is used to bring water to an insufficient temperature for heating and hot water supply. Aquathermal energy can also be used to cool buildings.

